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PROSPECTS FOR AMERICAN COTTON IN AUSTRIA

by

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This report is based on a personal survey made by Mr. Taylor, United States Agricultural Commissioner, American Embassy, London, England.

PROSPECTS FOR AMERICAN COTTON IN AUSTRIA

SUMMARY

From 1932 to 1937, the average number of spindles in Austria was reported to be 768,000. In March 1947, 601,480 spindles were in existence, of which 550,000 were in condition to operate, a reduction of 28.4 percent from the prewar average. Present operations are reported to be between 33.33 and 50 percent of full potential capacity based on one work shift a week. Based on prewar output, the potential capacity of 550,000 spindles would be 98,900 bales on one shift of 48 hours per week. Unless there is an unforeseen increase in efficiency, power, and labor, total mill consumption of cotton and staple fiber is not likely to exceed the equivalent 70,000 bales in 1948. Looms were reduced in number from 16,807 in 1937 to 14,775 in 1947, or a reduction of 12 percent. It is apparent that the looms will be able to absorb all the available yarns.

Since liberation and through most of 1947, all raw cotton in Austria has been supplied through the medium of processing or barter contracts, under which a percentage (now about 54 percent) of the textiles produced are returned to the supplier of the cotton. It is estimated that the cotton obtained under these contracts originated as follows: Brazilian 75 percent, Egyptian 5 percent, Russian 10 percent, Peruvian 5 percent, and Argentine 5 percent. This cotton is being supplied by agents or financiers in Switzerland, France, Britain, and Russia. The United States has not participated. Contracts are now being negotiated for 1948 supplies.

In the present disturbed state of Austrian finances, these processing contracts provide the only way of obtaining cotton. No cash or foreign exchange is involved, and the spinner is relieved of risk of a decline in the prices of raw cotton, yarn, or cloth.

Practically all cotton from the west arrives at Rotterdam or Antwerp and is delivered to the mills without delay. Trieste and Genoa have been used as ports of entry, especially for Egyptian cotton, but inland transportation from these ports has not been so satisfactory as that from Rotterdam and Antwerp. Transportation is apparently adequate as far as cotton is concerned.

The shortage of both skilled and unskilled labor, probably the most acute domestic problem of the Austrian textile industry, is reckoned as the serious factor retarding recovery. The lack of apprentices has also resulted in a cumulative shortage of trained workers. Efficiency of labor is reported to be between 50 and 70 percent as compared with prewar years. Inadequate food supplies contribute to the low efficiency rate.

With no wartime replacements, much of Austria's textile equipment is now in need of repairs, spare parts, or replacements. A considerable part is of German origin. Obviously it is impossible for Germany to supply the replacements. Austria must, therefore, look to other countries, i.e., the United States, Britain, Switzerland, or Czechoslovakia.

For fuel, Austria is largely dependent on imports of bituminous coal. The production of indigenous (brown) coal is still below prewar levels. Imports have so far been inadequate, but a new trade agreement with Poland, to be effective in August 1947, promises considerable improvement. The Zistersdorf oil fields in the Russian zone would provide sufficient fuel oil for Austria's needs if it were available to all zones. Following liberation, the military authorities found the electric plants badly disorganized and damaged. Low water caused a shortage of hydroelectric current in December, January, and February.

Austrian industry and trade have been subject to nationalization but with certain limitations. Commercial banking, mining, heavy industries, metals, coal, oil, and river navigation have been brought under some degree of control. So far no cotton-textile plants are included in the nationalization program.

There are two synthetic-fiber plants in Austria, one at Lenzing with a full capacity of 60 tons daily. Present production is 8 tons daily. The other plant is at St. Polten in the Russian zone, but it is reported that the greater part of the equipment has been removed. This plant is now operating at the capacity of 3 tons daily.

SPINNING CAPACITY

An indication of the possible development of the Austrian cotton-textile industry may be obtained by comparing the present spinning capacity with that of the prewar years. From 1932 to 1937 the average number of spindles was reported to be 768,000. In March 1947, 601,480 spindles were in existence, of which it was estimated that 550,000 could be operated. This is a reduction of 28.4 percent from the 1932 to 1937 average of 768,000. The present and the prewar number of spindles in each of the four military zones are as follows:

Zone	1932-37 average	March 1937	Percentage in zones
United States	132,312	98,892	16
Soviet.......	264,788	137,668	23
French.......	343,504	340,716	57
British......	27,412	24,204	4
Total......	768,016	601,480	100

During the prewar years 1932-37, the average consumption was about 138,000 bales annually. About 59 percent of this was United States cotton, with Indian and Egyptian making up the bulk of the remainder. Based on this consumption and the average number of spindles in operation, the output per spindle was about 86 pounds of cotton per year on the basis of one and one-half work shifts per week. For a single work shift per week, this would equal about 59 pounds per spindle per year, or a consumption of about 66,700 bales.

The Austrian spinners estimate that they can increase the output per spindle to 100 pounds per year. This would indicate a consumption of about 115,000 bales a year. At the old rate of 86 pounds, the consumption would be about 98,900 bales a year.

Spinners are of the opinion that about 5,000 tons of staple fiber will be spun. This is equal to approximately 26,000 bales of cotton. Since staple fiber uses the same equipment as cotton, whatever tonnage of staple fiber is spun will reduce the cotton-spinning capacity of the country by that amount.

Considering all the limitations, it would appear that mill consumption for 1947 will be about 46,000 to 55,200 bales of cotton and from 3,000 to 5,000 tons of staple fiber. The Austrian spinners have estimated that they will reach a capacity of 92,000 bales by April 1948 and about 115,000 bales for the whole of 1948. An estimate of 70,000 bales and 5,000 tons of staple fiber in that year would appear to be more conservative.

The number of looms in 1937 and in 1947 are reported as follows:

Zone	1937	1947
United States......	3,401	3,049
Soviet Union.......	5,755	3,608
French.............	7,302	7,435
British............	349	683
Total............	16,807	14,775

Since the spinning capacity has been reduced 28.4 percent and weaving capacity about 12 percent, it would appear that the looms are sufficient to weave all the available yarn. Earlier in the year about half the spindles were in operation about half the time. Consequently the output was not much more than 25 percent of full production on a single work-shift basis.

It is impossible to predict when the mills will be in full operation, even on a single work shift. There is desperate need for all kinds of mechanical replacements; for repairs, such as card clothing, belting, shuttles, and other spare parts; as well as processing supplies, such as starch, chemicals, etc. Starch is an example of a prime essential. It is almost impossible to weave single-strand cotton yarn unless the warp yarn has been previously starched or sized. Adequate food, clothing, fuel, and power must also be provided. The four-zone occupation adds to the confusion. Were it possible for the country to operate as an economic unit, it should not be difficult to develop a program that would synchronize the supply of these essential items and the supply of cotton. Only such a program will put the textile industry on a steady working schedule.

RAW COTTON

Some indication of the qualities of cotton used in a normal year may be obtained by an examination of Austrian imports of cotton, by countries of origin during 1937 as follows:

	Bales
United States.......	92,400
India...............	33,700
Egypt...............	32,300
Brazil..............	7,800
Others..............	32,100
Total.............	198,300

At the end of the war, Austria was completely out of raw cotton and had no credit, or other facilities, for buying cotton. The result has been a series of more than twenty so-called "processing or barter contracts," under which private individuals, or groups of financiers, mostly in Switzerland and France, have supplied the greater part of the cotton used. Under these processing contracts, the parties supplying the cotton take in exchange a certain percentage of the resultant yarn or cloth. In the first of such contracts, made in 1946, the cotton supplier furnished about 290 kilograms of raw cotton and received 100 kilograms of cloth. Later, as the demand for cotton goods increased, this was increased to 360 or 380 kilograms of raw cotton for 100 kilograms of cloth.

It is estimated that about 30 percent of the present contracts are for yarn and 70 percent may call for either yarn or cloth. On account of the scarcity of bleaching agents, dyestuffs, and other finishing materials, much of the cloth is being delivered to the supplier in the form of unfinished goods. The kind and quality of the yarn, or cloth, to be produced is specified before manufacturing begins. The foreign supplier must therefore furnish cotton of suitable grade and staple or assume the responsibility if the product is not of the desired quality. It is reported that most of the cotton consumed as a result of this type of contract averaged around Middling to Strict Middling and inch staple.

The conditions of these contracts make it almost impossible to predetermine the origin of the cotton that may be supplied to spinners. The contractor not only has to supply the right kind of cotton but has to sell the resultant product. The quality of the goods specified largely governs the quality of the raw cotton to be supplied. While there are no official data on the kinds of cotton so far actually supplied, they have been estimated roughly as follows: Brazilian 75 percent, Egyptian 5 percent, Russian 10 percent, Peruvian 5 percent, and Argentine 5 percent. The actual qualities probably differ from the above estimates, but accurate date are difficult to obtain because of the four-zone occupation. The net result of this type of operation has been the virtual elimination of American cotton. The cotton being furnished under existing contracts will take care of spinner requirements until the end of 1947. New contracts are already under negotiation for 1948.

In the operation of processing contracts, obviously the cotton that will be supplied will be the cheapest that will produce the yarn, or cloth, of the desired quality. It does not appear possible to make a processing contract involving the use of United States cotton at the present. Such cotton would be too high, and it is supposed that the goods would have to be sold for dollars to pay for the cotton. A comparison made by one of the larger cotton mills in March 1947, showed that American Strict Middling full inch was quoted at 39.25 cents per pound whereas Sao Paulo of equal grade and staple was 34.25 cents. These were firm offers, delivered in Austria. Similarly, Peruvian Tanguis, about 1-3/16-inch staple, has been taken in preference to United States inch staple, because the price was lower. One of the most unusual prices, however, was a quotation of Egyptian Karnak, 1-1/2-inch staple, which was below American 1-1/16-inch staple.

The only hope by which American cotton may recover even a small fraction of this market is by sales on credit. If credit were available, it would go a long way in establishing the independent operation of the cotton mills and would enable them to resume the production of their own standard qualities of goods, sell their own product, and reestablish their own prewar export and import contacts. If this is developed in the not-too-distant future, it is probable that a part of the goods produced might be sold in the so-called "dollar areas or hard-currency markets." Although deliveries of foreign-grown cottons are reported to be fully equal in quality to American prewar deliveries, American cotton on equal terms would be preferred. Spinners also desire to resume old connections and business associations.

In June 1946, the President of the Austrian Spinners' Association stated that the following grades and staples of American cotton were desired: Approximately 10 percent Middling and/or Strict Middling 15/16-inch staple; approximately 60 percent Middling and/or Strict Middling 15/16 inch to 31/32 inch; approximately 30 percent Strict Middling and/or Good Middling 1-1/16 inch. From the samples of cotton examined in Vienna, it appears that the Austrian ideas of grade and staple conform in general to the universal standards.

Because of a desire to produce higher valued goods for export and thus accumulate a larger balance of exchange, there has been a tendency toward the use of high-grade cotton. Under the operation of processing contracts, less than 50 percent of the available goods are sold locally, the balance being exported by the supplier of the cotton. The average grade of prewar imports was high, but the fact that about 17 percent of the imports were of Indian origin indicates the production of considerable coarse yarn or cloth. While high-quality cotton goods will sell at higher export prices and insure more profitable processing-contract operations, it will be quite different when the industry returns to more normal operations. When the time comes for the production of domestic, as well as export goods, under free-market conditions, some low-grade cotton will be used. It is important to keep this point in mind in the event that the United States undertakes to supply cotton to Austria.

If the four military zones are still in existence when American cotton becomes available, some thought should be given to the method of distribution. There are several possible alternatives. First, to have the cotton received and distributed completely under American control. Second, have it distributed by the Austrian Government. Third, distribute it by the Austrian Spinners' Association. Fourth, deliver it first to the American zone and later to other zones. Fifth, deliver it to all four zones without discrimination. As between the four zones, there is no interference one with another, since the zones operate independently. However, there may be types of interference within a zone. If the military forces in the French, British, Soviet, or the United States zones so desired, they could take away more or less of the yarn, or cloth, or otherwise interfere with the mills in their own zone. There is no possible way in which this sort of thing can be stopped short of complete military evacuation.

It may be difficult otherwise to establish effective safeguards as to cotton use and control of the destination of the final product. The whole problem of a cotton supply will be simplified, however, when a peace treaty is signed, especially if it removes all interference with Austrian sovereignty.

A number of agents or merchants are now quoting prices in Vienna but their functions are of a very limited character, since they have not been able to make any direct sales or contracts with the mills. However, they are obtaining prices on a complete range of grades and staples covering the various growths of cotton from the United States, Brazil, India, Bengal, Peru, Argentina, Egypt, etc., keeping spinners informed, and contributing their services in the handling of the cotton delivered under the processing contracts. It is supposed that they receive a commission for such services.

LABOR

It is generally admitted that the shortage of trained and skilled workers is one of the most serious problems confronting the Austrian cotton-spinning industry. This shortage is very evident in spite of the reduced operation of equipment. Since 1939 it has been difficult to train young apprentices, and many of the older or aged workers have retired. The war has also taken its toll, and the four-zone occupation has added further to the labor crisis. Some consideration has been given to the possibility of importing skilled Italian labor.

Insufficient food and malnutrition have reduced vitality to a low ebb, and it is estimated that labor efficiency ranges between 50 and 70 percent of the prewar figure. Since Austria does not meet its own food needs, food imports in larger quantities will be necessary. Because of these conditions, recovery is likely to be a slow and painful process.

MACHINERY

As in all other European countries, Austrian textile equipment has been subject to extreme wear and tear during the war, with practically no chance for renewal or replacement. Much of the equipment is of German origin, and replacement has not been possible either during or since the war.

Other sources of supply are the United States, the United Kingdom, Switzerland and France, but all these countries are also in great need of replacements in order to increase their own efficiency.

Some of the imperatives are card clothing, belting, spinning, travelers, shuttles, knitting and hosiery-machine needles, and a host of other items. If these needs are not supplied, the mills will be compelled to "cannibalize" from one machine to the other. In some cases, the absence of one small part may cripple an entire machine.

Corn starch for the sizing of single-thread warp yarn is one of the most despearately needed items. Its shortage may suspend a considerable part of the weaving industry.

These conditions, plus insufficient food and low labor efficiency, represent important obstacles in the recovery of the textile industry. The net result is an extremely low output, based on the recorded spindles, and a limited prospect of increasing the output substantially in the immediate future or of reaching the maximum output of the reported 550,000 spindles.

The Spinners' Association estimates that between 90 and 95 percent of Austria's spinning frames are equipped with some form of high-draft attachments. In the weaving industry it is estimated that about 18 to 20 percent of the looms are of semiautomatic or automatic types.

COAL, OIL, AND POWER

Under date of January 1, 1947, the United States Military Government in Vienna issued the following report on the coal situation in Austria:

> "Austria has always been dependent on the importation of coal to maintain her economy. Coal is mined in Austria but the product in general is of poor quality, is unsuitable for gas production and many industrial uses, and the quality available falls short of the demand. The table below shows the position in 1937, the last year prior to German intervention.

1937 Coal Usage
(Exclusive of locally produced coke)

	Tons	Percentage of total
Indigenous bituminous....	229,712	3.4
Indigenous brown coal....	3,129,696	46.3
Imported bituminous......	2,656,921	39.4
Imported brown coal......	185,169	2.7
Imported coke............	550,689	8.2
Total..................	6,752,187	100.0

"After the German entry, hours of work were increased and coal production in general was brought to a very high level, reaching a peak in 1944.

Indigenous coal production in tons

Year	Bituminous	Brown	Total
1937	229,712	3,129,696	3,359,408
1942	224,711	3,519,748	3,744,459
1943	214,188	3,645,731	3,859,919
1944	194,504	3,673,558	3,868,062
1945	71,616	2,065,981	2,137,597
1946	105,029	2,380,629	2,485,658

"After reaching a low point in May 1945 when coal production in the United States zone dropped to 22,051 tons, the average production steadily increased and in a rather short time reached the level of 1937 and even slightly exceeded it.

"Conditions in the British zone were essentially the same and the British Element took all the necessary steps to bring production back to almost the 1937 rate.

"The coal production in the Soviet zone has not yet recovered from the low point after occupation and the output is still by about 50 percent below the peace level.

Comparative production statistics (Tons/Month)

Year	U.S.Zone	British Zone	Soviet Zone
1937	50,000	189,000	47,000
1944	69,000	227,000	27,000
1946	50,100	141,851	12,429
% 1937	100%	75%	27%

"The above table applies to average production by zones in Austria in 1946.

"The following table shows the production for October and November 1946.

Comparative production statistics (Tons/Month)

	U.S.Zone	British Zone	Soviet Zone
1937	50,000	189,000	47,000
Oct. 1946	48,400	155,000	not available
% Oct. of 1937	97%	82%	do
Nov. 1946 (est.)	50,000	140,000	do
% Nov. of 1937	100%	74%	do

> "The difference between indigenous production and total requirements is partially covered by importation of coal from Germany, Poland, and Czechoslovakia, and through continued military help. The Austrian Government took over complete control of procurement, purchase, allocation, and distribution of all indigenous and imported coal as of July 1, 1946. Since the available coal is not enough to meet Austrian requirements, the situation has continued very critical. Failure by the Polish Government to meet its promised coal deliveries in October, for instance, resulted in a complete shut down of railroad traffic in eastern Austria and Vienna. Coal allocations for industry have been severely curtailed in order to keep the traffic running and public utilities operating on a reduced scale. However, in spite of all endeavors the supply of solid fuel for space heating is very poor and as a result Austrians are facing a very difficult winter."

This report shows that Austria is largely dependent on imports of high quality, bituminous coal for the more important industrial enterprises.

It is estimated that the Zistersdorf oil fields in the Russian zone would provide sufficient crude oil to meet Austria's need, but the date and extent of the Russian release to the Austrian Government is very uncertain. Many factories are able to use either coal or oil alternatively.

Following German occupation, the United States Military Government found the electric-energy supply badly disorganized and some installations damaged by shell fire and bombing. Supplies of domestic brown coal were limited and low in quality. Because of this shortage and the acute need for coal for other purposes, some electrical plants were converted from coal to fuel oil to be supplied from the Zistersdorf oil fields. During the past winter months, the shortage of water seriously reduced the supply of hydroelectric current. As a result, the textile mills were compelled to go on a low schedule of operations in December, January, and February. It was expected, however, that the water supply would be inadequate between April and November 1947.

Out of all this turmoil the joint Military Government engineering staffs are evolving a solution, but the power supply "will be critical for a long time." The importation of coal is a prime factor in the generation of power, either steam or electric, and this is not yet completely stabilized as to timing or volume. Substantial improvement is promised, however, by an agreement with Poland calling for the delivery of some 50,000 tons of hard coal monthly, beginning with August 1947.

A number of the cotton mills are equipped with both steam and electric power installations (in part but not in total). Therefore, they are able to change from one to the other to some extent.

The military authorities have the matter well in hand, but it is quite evident that power will continue to be a serious problem until coal supply and requirements are brought into balance, the Zistersdorf oil fields made fully available to all Austria, and the electric circuits of adjacent countries tied in with each other. Only in this way can Austria utilize all the available power to the best advantage.

TRANSPORTATION

Practically all cotton from the west arrives by boat at Rotterdam or Antwerp. It is being delivered from the ports to the mills in Austria in an average of about 2 weeks. This would seem to indicate that transportation is not a serious problem.

Trieste and Genoa have also been mentioned as ports of entry, especially for Egyptian cotton. However, postwar experience with inland cotton transportation from these ports has not been so satisfactory as with Rotterdam and Antwerp.

NATIONALIZATION

Following the end of the war, the internal conditions in Austria were so complicated that some form of industrial control had to be provided by the Government for certain segments of Austrian economy.

Some of the more acute and special problems included the following:

1. The shortage of equipment, raw materials, skilled labor, etc.
2. Uncertainties arising from reparations and restitution claims have made it difficult, or impossible, to obtain working capital for many industrial properties.
3. Austria may find it necessary to seek bargaining or competitive equality (through a limited or complete nationalization program) with its neighbors, nearly all of whom, including the Soviet Union, already have nationalization programs well under way or complete.

Interest in nationalization is prompted, in large measure, by disagreement as to what constituted "German External Assets in Eastern Austria," as well as for other reasons. The earlier control efforts were somewhat limited but included mining, crude oil, iron and steel, locomotives and freight cars, power generation, and high-tension power transmission. In general, nationalization has been extended to include the following general industrial groups: Commercial banks, mining, steel, iron, coal, steam and electric machinery, chemical fertilizers, copper, aluminum, oil, and river navigation.

Even though the cotton mills of Austria are very important to the internal and external economy of the country, are large units, have large financial investments, and employ much labor, it is significant that no textile mills are so far included in the list of nationalized enterprises.

SYNTHETIC FIBERS

The Austrian spinners estimate that the volume of synthetic-fiber production and consumption in 1948 will equal about one-third of the total cotton consumption. As a matter of fact, this may not exceed 5,000 tons of staple fiber.

One synthetic-fiber plant (the Lenzinger Papier und Zellwolle Fabrik A.-G. at Lenzing) has a theoretical maximum capacity of 60 tons daily or 21,900 tons annually. The present production is 8 tons daily or 2,920 tons annually. It was expected that production would be increased in April 1947 to 15 tons daily or 5,475 tons annually. Shortages of coal and essential chemicals will continue to limit the output.

It is expected that about one-half this output will be exported and exchanged for "long staple South American cotton" on the basis of 1 ton of staple fiber for 1.05 tons of cotton.

Another synthetic-fiber plant (the Erste Oesterreichische Glanzstoff Fabrik A.-G. at St. Polten, Lower Austria) is in the Soviet zone. The greater part of the machinery and equipment was reportedly removed by the Soviets during the early days of their occupation. The plant is now operating at its maximum capacity of 3 tons daily or 1,095 annually. Most of the output is being processed by the Soviets in textile plants which were seized "under the terms of the Potsdam Agreement." The present production is a heavy-gauge filament yarn which is considered by the Austrians to be impractical for clothing purposes.

The operation of a synthetic-fiber (rayon) factory calls for the transportation of a considerable tonnage of wood pulp, coak, and bulky and heavy chemicals, much of which may have to be imported. With all the other difficulties confronting Austria, it is not likely that the synthetic-fiber industry will reach a high level of production in the near future.

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